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DIVISION ON ENGINEERING AND PHYSICAL SCIENCES

**The Future of Center-Based,  
Multidisciplinary Engineering Research**

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# Study Timeline

<b>Received Funding</b>	<b>July 15, 2015</b>
<b>Final Report Due</b>	<b>January 2017 (18-month study)</b>
<b>First Committee Meeting</b>	<b>December 14-15, 2015</b> <b>Keck Center, Washington D.C.</b>
<b>Kickoff Symposium</b>	<b>January 25, 2016</b> <b>Keck Center, Washington D.C.</b>

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# Statement of Task

An ad hoc study committee will develop a vision and high-level, strategic recommendations for the future of NSF-supported center-scale, multidisciplinary engineering research. The study will be forward-looking — focusing on the forces that are likely to shape engineering research, education, and technological innovation in the future, as well as the associated challenges and opportunities. It will consider and evaluate the most promising models and approaches for multidisciplinary engineering research that can successfully address these challenges and opportunities. NSF's Engineering Research Centers will be used as prominent examples or cases in the study, but the intent is not to evaluate them. The study will also be informed by other models of large-scale, multidisciplinary engineering research in the United States and other parts of the world.

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## Statement of Task (continued)

The products of the committee's work will be: (1) a rapporteur-authored summary of a symposium, and (2), a final consensus report containing committee findings and strategic recommendations that include inspiring visions for center-scale research in engineering over the next 10-20 years, new models for innovation that connect center research to real-world impacts, the appropriate role and emerging models for such centers in education and broadening participation, and how to continuously enable breakthrough engineering research by attracting the most innovative and diverse talent in the field. **The report will focus on describing visions and opportunities for the future of multidisciplinary center-scale engineering programs, and presenting guiding principles and strategic recommendations for realizing the new visions and opportunities rather than evaluating the current center construct and suggesting evolutionary improvements.**

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# Committee Status

**Co-Chairs Approved:**     **David Walt (NAE, Tufts)**  
**Maxine Savitz (NAE, retired Honeywell)**

**Committee Members:**     **14 nominations in the approval process**

**Composition:**             **Diverse group featuring expertise in a variety of engineering disciplines, university and industry perspectives, engineering education, outreach to K-12, innovation, technology transfer, STEM policy, and experience with ERCs**

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# **First Committee Meeting**

**Dates: Monday-Tuesday, December 14-15, Keck Center**

**Purpose: Get committee together and give them a grounding in center-based programs including ERCs, history, accomplishments, and challenges for the future.**

**Request: NSF representative to provide overview of expectations and criteria for success of the study on December 14.**

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# Kickoff Symposium

**Date: Monday, January 25, 2016, Keck Center**

**Purpose: Discuss forces likely to shape the future of center-based engineering research**

**Format: Plenary speakers plus breakout sessions to elicit ideas from the attendees; summary authored by a rapporteur**

**Request: NSF representative to open the symposium and set the stage**

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